

STATE OF DELAWARE DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL DIVISION OF WATER RESOURCES 89 KINGS HIGHWAY PC BCx 1401 DOVER DE AWARE 19903

May 20, 1987

OFFICE OF THE

Dr. Alvin R. Morris Director Warer Management Division United States Environmental Protection Agency Region III 841 Chestnut Building Philadelphia, PA 19107

CERTIFIED MAIL RETURN RECEIPT REQUESTED TEUEPHONE (302) 736 - 4860

RE: Notice of Violation No. III-87-01-VW NPDES Permit No. DE0050741 Army Creek Wellfield New Castle County, Delaware

Dear Dr. Morris:

This is to advise you that the NPDES permit for the Army Creek wellfield, DE0050741, was reissued to the New Castle County Department of Public Works on May 15, 1987. Whereas the County cannot presently comply with the terms and conditions of the reissued permit, the matter was simultaneously referred to the Attorney General's office for subsequent enforcement action. This enforcement action will also address the permit violations noted in the referenced Notice of Violation; any settlement reached in this case will account for and resolve the previous noncompliance.

The permittee is aware that such action would be taken and has already contacted the Attorney General's office relative to a negotiated settlement. My staff will continue to keep your agency informed of the Department's progress in this matter. Any specific questions can be directed to Paul Janiga at (302) 736-5725.

sincerely,

R. Wayne Ashbee

/ Director

DIVISION OF WARE 3000093



STATE OF DELAMARE
DEPARTMENT OF NATURAL RESOURCES
& ENLACTMENTAL CONTROL
DIVISION OF WATER RESOURCES
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SURFACE MATER MATAGEMENT SECTION TELEPHONE 302 736 5731

May 18, 1987

Mr. David C. Clark, P.E. Department of Public Works New Castle County 2701 Capital Trail Newark, Delaware 19711 CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: Army Creek Wellfield NPDES Permit DE 0050741

Dear Mr. Clark.

Enclosed you will find a copy of the above referenced permit as reissued on May 15, 1987. The permit reflects our consideration of comments submitted on behalf of New Castle County by Mr. George J. Weiner in a letter dated April 29, 1987. The following summarizes the comments and our response.

<u>Comment 1</u>: Llangollen Landfill's name has been changed to Army Creek Landfill: as such, the permit should reflect this fact. Further, the wellfield is not located on either Army Creek or Delaware Sand and Gravel Landfills.

Response: Any reference to Llangollen Landfill has been changed to Army Creek Landfill. The location description has been changed to "in the vicinity of the Army Creek Landfill.

Comment 2: The draft permit does not refer to the fact that the recovery wells are also pumping leachate from the Delaware Sand and Gravel Landfill. Suggested wording on page 2 ... "The wells are pumped for the purpose of recovering landfill leachate from the Army Creek and Delaware Sand and Gravel Landfills".

Response: Although the pumping may result in the withdraw of Delaware Sand and Gravel leachate, the draft description on page 2 indicates that the <u>purpose</u> of the pumping is to control leachate from the Llangollen (Army Creek) Landfill. Therefore, Delaware Sand and Gravel Landfill leachate has not been added in the final permit.

<u>Comment 1</u>: The permit should allow for direct discharge of any internal waste stream upon approval of the Department. Suggested wording to accomplish this was provided.

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Mr. David C. Clark, P.E. Page Two May 15, 1987

Response: We acknowledge that there may be a time when conditions will exist such that it would be prudent to direct discharge new and/or existing wells. This would particularly hold true as recovered groundwater improves (which is the ultimate goal of the capping and upgradient control system). Special condition 2 has been amended to document that such actions may be prudent, but should be carried out only after the permit is appropriately amended. This change in the permit accommodates your concern without requiring re-advertisement of the draft permit at this time.

<u>Comment 4</u>: The county is concerned that the effluent limitation for pH (6.0-9.0~S.U.) is inconsistent with background pH levels in the groundwater.

Response: Although groundwater pH is at times below 6.0 S.U.; it is our opinion that the proposed treatment is likely to result in the ability to comply with the limits as drafted. We acknowledge your reluctance to accept these limits based on a projection of what future operation might provide in terms of effluent pH. We have decided to maintain the pH limitations of 6.0-9.0 S.U. in the permit (changing them now requires re-advertisement) and propose that the issue of documenting the appropriateness of different pH limits be addressed in the consent order that is currently being negociated.

<u>Comment 5</u>: The limit on the daily average discharge rate of 1.8 MGD is less than previous drafts. The county recommends that the limit should be changed to 2.0 MGD. Corresponding changes in mass loadings should also be made.

Response: The permit average iron concentration limits are technology based. These effluent iron concentration limits were based on the information and projections contained in CABE's "Cost Effective Analysis"; 5.0 mg/L is consistent with the projected effluent concentration from a lined lagoon with cascade aeration and 47 hours detention time at 1.8 MGD. Using the proposed creatment system, the removal efficiency for iron has been projected at approximately 70%. As a result, the permit average flow limit has been set at 1.8 MGD. Once the proposed creatment system has been designed and the design criteria established, if the design flow rate is different than 1.8 MGD, the flow limit and corresponding mass loading limits can be modified accordingly through the permit amendment process.

<u>Comment 6</u>: Quarterly bioassays should be less frequent because reduced biological activity is encountered in the winter months. The permittee's recommended frequency is two per year the first year and annual thereafter (unless toxic reduction evaluation is triggered).

Response: The frequency of the bioassay, one per quarter, has been maintained. The purpose of the bioassays is to monitor for the possible discharge of toxics as the quality of the leachate may change. Further, implementation of a toxics reduction plan would be to control toxic discharges on a long term basis, not just seasonally.

Mr. David C. Clark, P.E. Page Three May 18, 1987

 $\underline{\texttt{Comment ?}} : \quad \text{The rationale for requiring influent iron monitoring should be better identified.} \quad \text{Suggested wording has been provided.}$

Response: We agree. Suggested wording has been used.

 $\underline{\textit{Comment 8}} \colon \text{ The permit includes no schedule of compliance to meet the final effluent limitations. It has been presumed such a schedule would be included in a consent order.}$

 $\underline{\text{Response}}\colon$ Your presumption is correct. The consent order negotiations are underway.

Please feel free to contact me if you have any questions on the information contained herein.

Sincerely,

J. Paul Jones
Environmental Engineer
Water Pollution Branch

cc: George J. Weiner
Alex Slinsky, EPA
Lee J. Beetschen
Jeanne L. Langdon

Enclosure

State Permit Number WPCC 3028A/77 NPDES Permit Number DE 0050741 Effective Date May 15, 1987 Expiration Date May 14, 1992

AUTHORIZATION TO DISCHARGE UNDER THE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

AND THE LAWS OF THE

STATE OF DELAWARE

In compliance with the provisions of the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251 et seq.) (hereinafter referred to as "the Act"), and pursuant to the provisions of 7 $\underline{\text{Del}_{+}} \underline{C}_{+}$, \$6003

New Castle County Department of Public Works 2701 Capitol Trail Newark, Delaware 19711

is authorized to discharge from the facility (Point Sources 001) located at

Army Creek Wellfield, located in the vicinity of Army Creek Landfill

to receiving waters named

Army Creek, a tributary of the Delaware River

The effluent limitations, monitoring requirements and other permit conditions are set forth in Part I, II and III hereof.

R. Wayne Ashbee, Director Division of Water Resources

Department of Natural Resources

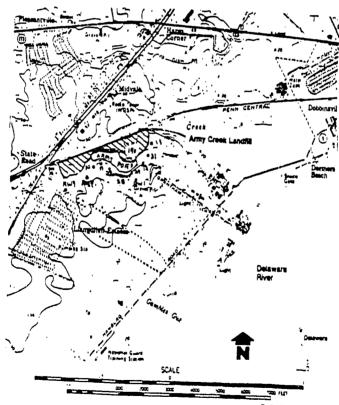
and Environmental Control

Date Signed

Part I State Permit Number WPCC 3028A/77 NPDES Permit Number DE 0050741 Page 2 of 17 Pages

A. General Description of Discharges and Facilities

Discharge OCl consists of groundwater, from 11 different groundwater recovery wells that is combined, treated and discharged through a single outfall to Army Pond. The wells are pumped for the purpose of recovering landfill leachate from the Army Creek Landfill. The pumping has created and continues to maintain a hydraulic divide for the purpose of controlling the migration of the leachate plume. The current recovery wells are identified as RW-1, RW-9, RW-10, RW-11, RW-12, RW-13, RW-14, RW-27, RW-28, RW-29 and RW-31. These wells are shown on the location map below. The treatment consists of aeration and sedimentation in a lined lagoon.



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During the period beginning effective date and lasting through the expiration date the permittee is authorized to discharge from point source(s) 001^* the quantity and quality of effluent specified below: EFFLUENT LIMITATIONS

The average quantity of effluent discharged from the wastewater treatment facility shall not cubic meters per day. 6811 million gallons per day (mgd) or exceed

Maximum Instantaneous

		Daily Average	280	Daily	Daily Maximum	Concentration
Parameter	1bs/day	1bs/day kg/day	Concentration	lbs/day kg/day	kg/day	
Total Suspended Solids	450	205	30 mg/L	979	307	45 mg/L
Iron (Total)	7.5	34	5 mg/L	113	51	7.5 mg/L

The control of the discharge shall not be less than 6.0 standard units nor greater than 9.0 standard units. The discharge shall be free from floating solids, sludge deposits, debris, oil and scum.

*Discharge is treated groundwater from recovery wells RW-1, RW-9, RW-10, RW-11, RW-12, RW 14. RW-27, RW-28, RW-29 and RW-31.

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During the period beginning effective date and lasting through expiration date Such discharge shall be monitored by the permittee as specified below: the permittee is authorized to discharge from outfall(s) 001 MONITORING REQUIREMENTS

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Honitoring Requirement

Effluent Parameter

Heasurement Frequency

Recording/Totalizing Composite Composite Sample Type Continuous

Once/week

Total Suspended Solids

Iron (Total)

Blosssay*

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Hd

Grab Grab Once/3 months Once/week Once/week

Once/week Influent Parameter** Iron (Total)

Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: At the discharge of the combined waste stream of treated recovery well

**Influent monitoring shall be conducted for the purpose of establishing percent removal of iron as *Bioassay requirements are specified in Special Condition 4 on page 17. discharges.

a basis for reviewing the capability of the treatment system.

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D. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

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2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or non-compliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

E. Monitoring and Reporting

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

Monitoring results obtained during the previous one (1) month shall be summarized for each month and reported on a Discharge Monitoring Report Form (EFA No. 3320-1), postmarked no later than the 28th day of the month following the completed reporting period. The first report is due on June 28, 1987. Signed copies of these, and all other reports required herein, shall be submitted to the State at the following address:

WATER POLLUTION CONTROL BRANCH OF THE DELAWARE DEPT. OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL, DIVISION OF WATER RESOURCES, R & R BUILDING, P. O. BOX 1401, DOVER, DELAWARE 19903 TELEPHONE: (302) 736-5726

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3. Definitions

- a. The daily average discharge The total discharge by weight during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days during the calendar month when the measurements were made.
- b. The daily maximum discharge The total discharge by weight during any calendar day.
- c. Maximum instantaneous concentration The concentration of a pollutant in terms of milligrams per liter which represents the value obtained from a grab sample of an effluent. The maximum instantaneous concentration shall be based on a review of the degree of fluctuation experienced in comparable systems. For purposes of compliance, the maximum instantaneous concentration shall be based on the actual analysis of the grab sample.
- d. Bypass The intentional diversion of wastes from any portion of a treatment facility.
- e. Upset An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facility, inadequate treatment facilities, lack of preventive maintenance or careless or improper operation.
- f. Composite sample A combination of individual samples obtained at intervals over a time period. Either the volume of each individual sample is proportional to discharge flow rates or the sampling interval (for constant volume samples) is proportional to the flow rates over the time period used to produce the composite. For a continuous discharge, a minimum of 24 individual grab samples shall be collected and combined to constitute a 24 hour composite sample. For intermittent discharges of 4-8 hours duration, a minimum of 12 grab samples shall be collected and combined to constitute the composite sample for the discharge. For intermittent discharge intermittent discharges of less than 4 hours, a minimum of individual grab samples shall be collected and combined to constitute the composite sample equal to the duration of the discharge in hours times 3 but not less than 3 samples.
- g. Grab sample An individual sample collected in less than 15 minutes
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- h. I/S (immersion stabilization) A calibrated device is immersed in the effluent stream until the reading is stabilized.
- i. The monthly average temperature The arithmetic mean of temperature measurements made on an hourly basis, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar month, or during the operating month if flows are of shorter duration.
- j. The daily maximum temperature The highest arithmetic mean of the temperature observed for any two (2) consecutive hours during a 24hour day, or during the operating day if flows are of shorter duration.
- k. Measured flow Any method of liquid volume measurement the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.
- Estimate To be based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters and batch discharge volumes.
- m. Non-contact cooling water The water that is contained in a leak-free system, i.e., no contact with any gas, liquid, or solid other than the container for transport; the water shall have no net poundage addition of any pollutant over intake water levels.

4. Test Procedures

Test procedures for the analysis of pollutants shall conform to the applicable test procedures identified in 40 C.F.R., Part 136, unless otherwise specified in this permit.

5. Quality Assurance Practices

The permittee is required to show the validity of all data by requiring its laboratory to adhere to the following minimum quality assurance practices:

- a. Duplicate⁽¹⁾ and spiked⁽²⁾ samples must be run for each constituent in the permit on 5% of the samples, or at least on one sample per month, whichever is greater. If the analysis frequency is less than one sample per month, duplicate and/or spiked samples must be run for each analysis.
- b For spiked samples, a known amount of each constituent is to be added to the discharge sample. The amount of constituent added should be approximately the same amount present in the unspiked sample, or must be approximately that stated as maximum or average in the discharge permit.

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- c. The data obtained in a and b shall be summarized in an annual report submitted at the end of the fourth quarter of reporting in terms of precision, percent recovery, and the number of duplicate and spiked samples run, date and laboratory log no. of samples run and name of analyst.
- d. Precision shall be calculated by the formula, standard deviation s=(-d/k), where d is the difference between duplicate results, and k is the number of duplicate pairs used in the calculations.
- e. Percent recovery shall be reported on the basis of the formula $R=100\ (F\cdot I)/A$, where F is the analytical result of the spiked sample, I is the result before spiking of the sample, and A is the amount of constituent added to the sample.
- f. The percent recovery, R, in e above shall be summarized yearly in terms of mean recovery and standard deviation from the mean. The formula, $s = ((x \cdot x) / (n \cdot 1))$, where s is the standard deviation around the mean x, x is an individual recovery value, and n is the number of data points, shall be applied.
- g. The permittee or his contract laboratory is required to annually analyze an external quality control reference sample for each pollutant. These are available through the EPA regional quality assurance coordinator. Results shall be included in the annual report, c above.
- h. The permittee and/or his contract laboratory is required to maintain an up-to-date and continuous record of the method used, of any deviations from the method or options employed in the reference method, of reagent standardization, of equipment calibration and of the data obtained in a, b and f above.
- If a contract laboratory is utilized, the permittee shall report the name and address of the laboratory and the parameters analyzed together with the monitoring data required.

6. Records

- a. For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:
 - (1) The date, exact place and time of sampling or measurements;
 - (2) The person(s) who performed the sampling or measurements;
 - (3) The dates analyses were purformed;

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- (4) The person(s) who performed each analysis:
- (5) The analytical techniques or methods used;
- (6) The results of each analyses; and
- (?) The quality assurance information as stated above.
- b. An operator log must be kept on site at all times. This log should include time spent at the treatment facility on any date, and the nature of operation and maintenance performed.
- 7. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form (EPA No. 3320-1). Such increased frequency shall also be indicated.

8. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation shall be retained for three (3) years. This period of recention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Department.

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A. MANAGEMENT REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increase, or process modifications which will result in new, different or increased discharge of polluants must be reported by submission of a new NPDES application at least 180 days prior to commencement of the changed discharge. Any other activity which would constitute cause for modification or revocation and reissuance of this permit, as described in Part II. B-5 of this permit, shall be reported to the Department. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Noncompliance Notification

- a. If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitations or maximum instantaneous concentration specified in this permit, the permittee shall provide the Department with the following information, in writing, within five (5) days of becoming aware of such conditions:
 - (1) A description of the discharge and cause of noncompliance;
 - (2) The period of noncompliance, including exact dates and times and the anticipated time when the discharge will return to compliance;
 - (3) Steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.
- b. In the case of any upset or discharge subject to any toxic pollutant effluent standard under Section 307(a) of the Act, the Department shall be notified within 24 hours of the time the permittee becomes aware of the noncomplying discharge. Notification shall include information as described in paragraph 2(a) above. If such notification is made orally, a written submission must follow within five (5) days of the time the permittee becomes aware of the noncomplying discharge.

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Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all collection and treatment facilities and systems (and related appurtenances) installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance based on designed facility removals, adequate funding, effective management, adequate operator staffing and training and adequate laboratory and process controls including appropriate quality assurance procedures.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of the State or the United States resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

Bypassing

Any bypass of treatment facilities necessary to maintain compliance with the terms and conditions of this permit is prohibited unless:

- The bypass is unavoidable to prevent loss of life, personal injury or severe property damage; and
- b. There are no alternatives; and
- c. The Department is notified within 24 hours (if orally notified, then followed by a written submission, within five (5) days of the permittee's becoming aware of the bypass. Where the need for a bypass is known (or should have been known) in advance, this notification shall be submitted to the Department for approval at least ten (10) days before the date of bypass; and
- d. The bypass is allowed under conditions determined by the Department to be necessary to minimize adverse effect as provided under 7 <u>Del. C.</u>, Chapter 60, \$6011.
- Conditions Necessary for Demonstration of an Upset

An upset shall constitute an affirmative defense to an action brought for noncompliance with technology-based effluent limitations only if the permittee demonstrates, through properly signed contemporaneous operating logs, or other relevant evidence, that:

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- An upset occurred and that the permittee can identify the specific cause(s) of the upset; and
- b. The permitted facility was at the time being operated in a prudent and workman-like manner and in compliance with proper operation and maintenance procedures; and
- The permittee submitted a notification of noncompliance as required by Part II, A.2.b.
- The permittee has taken all remedial measures required to minimize adverse impact.

7. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of collection or treatment of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering surface waters or groundwaters.

8. Failure

The permittee, in order to maintain compliance with its permit, shall control production and all discharges upon reduction, loss or failure of the treatment facility until the facility is restored or an alternative method of treatment is provided.

9. Alternative Power Source

In order to insure compliance with the effluent limitations and all other terms and conditions of this permit, the Department may require that the permittee shall provide an alternative power sufficient to operate the wastewater collection and treatment facilities in accordance with the Schedule of Compliance contained in Part I of this permit.

B. RESPONSIBILITY

1. Right of Entry

The permittee shall allow the Secretary of the Department of Natural Resources and Environmental Control, the Regional Administrator, and their authorized representatives, jointly and severally, upon the presentation of credentials and such other documents as may be required by law:

a. To enter upon the permittee's premises where a point source is located or where any records are required to be kept under the terms and conditions of this permit; and

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b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit: to inspect any monitoring equipment or monitoring method required in this permit; to inspect any collection, treatment, pollution management, or discharge facilities required under this permit; and to sample any discharge of pollutants.

2. Transfer of Ownership and Control

In the event of any change in ownership or control of facilities from which the authorized discharge emanates, the permit may be transferred to another person if the permittee:

- Notifies the Department, in writing, of the proposed transfer;
 and
- b. A written agreement between the transferer and the transferee, indicating the specific date of proposed transfer of permit coverage and acknowledging responsibilities of current and new permittees for compliance with and liability for the terms and conditions of this permit, is submitted to the Department; and
- c. The Department within thirty (30) days of receipt of the notification of the proposed transfer does not notify the current permittee and the new permittee of intent to modify, revoke and reissue, or terminate the permit and require that a new application be submitted.

3. Reapplication for a Permit

At least 180 days before the expiration date of this permit, the permittee shall submit a new application for a permit or notify the Department of the intent to cease discharging by the expiration date. In the event that a timely and sufficient reapplication has been submitted and the Department is unable, through no fault of the permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable.

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4. Availability of Reports

Except for data determined to be confidential under Section 308 of the Act, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department of Natural Resources and Environmental Control. As required by the Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for under 7 Del. C., \$6013.

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- 5. Permit Modification, Revocation and Reissuance and Termination
 - a. After notice and opportunity for a hearing, this permit may be modified, terminated, or revoked and reissued in whole or in part during its term for cause including, but not limited to, the following:
 - (1) Violation of any terms or conditions of this permit;
 - (2) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
 - (3) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
 - (4) Information that the permitted discharge poses a threat to human health or welfare.
 - b. In addition to the provisions of paragraph 5.a. above, this permit may be modified, revoked and reissued in whole or in part, but not terminated, after notice and opportunity for a hearing, for cause including, but not limited to, the following:
 - (1) Material and substantial alterations or additions to the discharger's operation which were not covered in the effective permit provided that such alterations do not constitute total replacement of the process or production equipment causing the discharge which converts it into a new source;
 - (2) The existence of a factor or factors which, if properly and timely brought to the attention of the Department, sould have justified the application of limitations or other requirements different from those required by applicable standards or limitations but only if the requestor shows that such factor or factors arose after the final permit was issued;
 - (3) Revision, withdrawal or modification of State water quality standards or Environmental Protection Agency promulgated effluent limitations guidelines, but only when:
 - (a) The permit term or condition requested to be modified or revoked was based on a promulgated effluent limitations guideline or an Environmental Protection Agency approved State water quality Aspaga and 1.

Part II State Permit Number WPCC 3028A/77 NPDES Permit Number DE 0050741 Page 15 of 17 Pages

- (b) The U.S. Environmental Protection Agency has:
 - (i) Revised, withdrawn or modified that portion of the effluent limitations guidelines on which the permit term or condition was based; or
 - (ii) Approved a State action with regard to a water quality standard on which the permit term or condition was based; and
- (c) A request for modification or revocation and reissuance is filed within ninety (90) days after Federal Register notice is:
 - (i) Revision, withdrawal or modification of that portion .of the effluent limitations guidelines; or
 - (ii) The U.S. Environmental Protection Agency approval of State action regarding a water quality standard;
- (4) Judicial remand of Environmental Protection Agency promulgated effluent limitations guidelines, if the remand concerns that portion of the guidelines on which the permit term or condition was based and the request is filed within ninety (90) days of the judicial remand;
- (5) Any modification or revocation and reissuance of permits specifically authorized by the Act;
- (6) To comply with any applicable standard or limitation promulgated or approved under sections 301(b) (2) (C) and (D), 304 (b) (2) and 307 (a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (a) Contains different conditions or is otherwise more stringent than any effluent limitations in the permit; or
 - (b) Controls any pollutent not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

- (7) To contain a schedule of compliance leading to termination of the direct discharge by a date which is no later than the statutory deadline;
- (8) To modify a schedule of compliance in an issued permit for good and valid cause by a date which is no later than the statutory deadline.

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- (?) To modify a schedule of compliance of a POTW which has received a grant, under section 202(a) (3) of the Act, to reflect the amount of time lost during construction of the innovative and alternative facilities by a date which is no later than the statutory deadline.
- 6. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under $7 \ \underline{\text{Del. C}}$. Chapter 60.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation.

8. Discharge of Pollucants

Any person who causes or contributes to the discharge of a pollutant into waters of the State or the United States either in excess of any conditions specified in this permit or in absence of a specific permit condition shall report such an incident to the Department as required under $7 \ \underline{Del}_{-} C_{+}$, 56028.

9. Property Rights

The issuance of this permit neither conveys any property rights in either real or personal property, or any exclusive privileges, nor authorizes any injury to private property or any invasion of personal rights, or any infringement of Federal, State or local laws or regulations.

10. Construction Authorizations

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

11. Severability

The provisions of this permit are severable. If any provision of this permit is held invalid, the remainder of this permit shall not be affected. If the application of any provision of this permit to any circumstance is held invalid, its application to other circumstances; shall not be affected.

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A Special Conditions

- This permit supersedes State Permit WPCC 3028/77, NPDES Permit DE 0050741 as issued on October 11, 1977.
- It is recognized that the goal of the recovery well system is to control the migration of contaminated groundwater for the purposes of protecting downgradient groundwater supplies. Further, in keeping with this goal it may be necessary and prudent to install new recovery wells from time to time and discontinue the use of existing recovery wells and/or direct discharge certain new or existing wells to Army Creek or Pond. Prior to the discharging of any new or existing groundwater recovery wells, directly or indirectly, to a surface water, the activity must be approved and the permit amended in accordance with Part II.5(b) of this permit (see page 14).
- Prior to the startup of any treatment equipment necessary to achieve compliance with the effluent limitations contained herein, the services of a Delaware certified sewage treatment plant operator shall be obtained for the operation and maintenance of the equipment, the operator shall, at a minimum, be licensed at the level necessary to comply with the State of Delaware Regulations for Licensing Operators of Wastewater Facilities, as revised.
 - a. Biomonitoring shall be conducted using EPA test method 1002.0 Ceriodaphnia Survival and Reproduction Test on 100% effluent from discharge 001 and a control sample. The source of the control shall be Artesian Water Company Well Number 7 located in the Llangollen Wellfield. The testing procedure is outlined in the EPA publication Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/600/4-85/014, December 1985). Results shall be reported to the Department within 30 days of the completion of the test. The results shall be reported according to EPA/600/4-85/014, Section 10, "Report Preparation". Based on a review of the results of the biomonitoring, the Department may require periodic priority pollutant scans of both the effluent and the control.
 - b. The Student's T Test shall be used to determine whether differences in control and effluent biomonitoring data are significant. Toxicity of the effluent will be demonstrated if either the survival or reproductability rates for the discharge sample are significantly less than, at the 95 percent confidence level, the rates for the Arcesian Water Company Well Number 7. If any one test indicates the effluent is toxic, a second and third set of samples shall be collected and tested for toxicity within the following 60 days.
 - c. If toxicity is encountered twice in a 90 day period the permittee shall submit for approval, within 30 days of the test completion, a plan for conducting a toxicity reduction evaluation. The results of the toxicity reduction evaluation shall be submitted in accordance with a schedule approved by the Department.
 - d. Based on the results of the toxics reduction evaluation, additional effluent limitations, monitoring requirements and/or special conditions may be included in the permit, after notice and opportunity for a public hearing. If it is determined that additional treatment equipment is needed to meet the revised permit conditions, the permittee shall expeditiously install the necessary equipment in accordance with a schedule approved by the Department.
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